## **MEMORANDUM**

To:

Richard Harrell

From:

**Doug Upton** 

Date:

October 13, 2015

Subject:

Surface Water Analytical Results from Riverdale Creek and Yalobusha River

As requested personnel from the Field Services Division (FSD) collected surface water samples from six locations within Riverdale Creek and one location from the Yalobusha River just below the confluence of Riverdale Creek. These samples were analyzed by personnel from our MDEQ Laboratory.

The table below summarizes the analytical results and the attached map identifies the seven sampling locations. Most of the volatile compounds tested were found to be less than the method quantitation limits (MQL) and only those with detectable amounts were included in the table below. Total Arsenic and Total Lead were also measured in all seven samples. Total Lead was measured less than the MQL for all samples. Total Arsenic was detected in every sample but was well below the drinking water standard and within ambient background levels for Mississippi's streams and rivers. Each detectable amount was compared to the USEPA Drinking Water Maximum Contaminant Level (MCL) for evaluation. Those values that exceeded the MCL are highlighted in red.

Samples were collected and analyzed according to FSD Standard Operating Procedures (SOP). All associated paperwork is available upon request.

LOCDESCR	Date/Time	OTHER_NO	SAMPLING LOCATION	Arsenic, Total ug/l.	Total Arsenic, Drinking Water MCL. (ug/L)	cis-1,2-Dichloroetherie ug/L	cis-1,2- Dichloroethens Drinking Water MCL (ug/L)	Trichloroethene ug/L	Trichloroethene Drinking Water MCL (ug/L)	Vinyl Chloride ug/L	Drinking Water MCL (ug/L)
RIVERDALE CREEK	08/27/2015 11:43	SW17	0.4 Miles DS of PRB	1.48	10	38.2	70	TRACE 3.32	5	TRACE 2.15	2
RIVERDALE CREEK	08/27/2015 11:58	SW09	0.2 mlles DS of PRB	1.69	10	61.1	70	7.63	5	6.67	2
RIVERDALE CREEK	08/27/2015 12:12	RC-024	southern end of PRB	1.49	10	152	70	11.2	5	16.2	2
RIVERDALE CREEK	08/27/2015 12:27	RC-023	middle of PRB	1.42	10	66.0	70	6.29	5	TRACE 4.47	2
RIVERDALE CREEK	08/27/2015 12:41	SW19	middle of PRB	1.34	10	35.7	70	8.02	5	TRACE 3.83	2
RIVERDALE CREEK	08/27/2015 12:50	SW12	top of PRB	1.57	10	105	70	8.43	5	6.87	2
YALOBUSHA CREEK	08/27/2015 13:07	YR01	Yalobusha Rvr below confluence of Riverdale	3.51	10	<mql< td=""><td>70</td><td><mql< td=""><td>5</td><td><mql< td=""><td>2</td></mql<></td></mql<></td></mql<>	70	<mql< td=""><td>5</td><td><mql< td=""><td>2</td></mql<></td></mql<>	5	<mql< td=""><td>2</td></mql<>	2

